

UNITED KINGDOM CONFORMITY ASSESSMENT

1 UK TYPE EXAMINATION CERTIFICATE

2 Equipment Intended for use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) - Schedule 3A, Part 1

3 Certificate Number: CSAE 21UKEX1068 Issue: 0

4 Product: Minipurge Interface Unit Type MIU/d

5 Manufacturer: EXPO Technologies Limited

6 Address: Unit 2

The Summit Hanworth Road Sunbury on Thames Surrey, TW16 5DB

UK

- 7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- CSA Group Testing UK Limited, Approved Body number 0518, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations. The examination and test results are recorded in the confidential reports listed in Section 14.2.
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012/A11:2013

EN 60079-1:2014

EN 60079-31:2014

Except in respect of those requirements listed at Section 16 of the schedule to this certificate. The above standards may not appear on the UKAS Scope of Accreditation, but have been added through flexible scope of accreditation, which is available on request.

- If the sign 'X' is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use identified in the schedule to this certificate.
- This UK TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 12 The marking of this product shall be in accordance with Regulation 41 and include the following:

Refer to Schedule

J A Mav

Director of Operations





SCHEDULE

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13 **DESCRIPTION OF PRODUCT**

Marking

For MIU Types dA, dX and dT without breather drain installed



II 2 G D Ex db IIC T6 Gb Ex tb IIIC T80°C Db Ta = -20°C to +40°C

Or alternatively

Ex db IIC T5 Gb Ex tb IIIC T95°C Db Ta = -20°C to +55°C

For MIU Types dK and dN without breather drain installed



II 2 G D Ex db IIB + H₂ T6 Gb Ex tb IIIC T80°C Db Ta = -20°C to +40°C

Or alternatively

Ex db IIB+H₂ T5 Gb Ex tb IIIC T95°C Db Ta = -20°C to +55°C For MIU Types dA, dX, dT, dK and dN with breather drain installed



II 2 G Ex db IIB+H₂ T3 Gb Ta = -20°C to +55°C

The Minipurge Interface Units comprise a flameproof enclosure with various internal equipment dependent upon the application. The enclosures used are either Expo dA, dX, dT, dK or dN depending upon the size or type required.

The range of enclosures have the same basic geometry but are of differing sizes. The enclosures are all essentially square in profile with a circular lid. The joint between the lid and the enclosure forms a threaded flamepath; the lid is secured by means of a locking device. There is an option to include bosses for the installation of internal apparatus. Mounting is by means of two or more tapped holes in the rear face or by the use of mounting pads. Two or more protruding mounting lugs are optional.

External earthing facilities comprise M4 (or larger) earth studs on the surface of the box or mounting pads; the studs are equipped with nuts, washers and anti-rotation lugs. Alternatively or additionally, external earthing may be provided at the mounting lug(s). Tapped holes in the earth lugs between antirotation ribs are optional.

Internal earthing is provided either by a tapped hole in the internal rear face or by means of conventional rail-mounted earth terminals secured to the internal rear face.

"O" ring seals may be used to enhance the ingress protection rating.

The enclosures may be manufactured from copper-free aluminium, grey iron, S.G. iron, phosphor bronze, gunmetal or stainless steel.

Cable entry facilities are provided on the sides and rear of the enclosure.

To allow the control of the internal equipment, linear feed through devices, Type C9L, may be utilised as required. These are installed in the areas designated for cable entry devices. The feed through device comprises a threaded barrel with a central shaft secured with circlips at each end. The device is secured in the wall (or rear) of the enclosure by means of a locknut and optional thread sealing washer. An optional external "O" ring seal around the shaft, outside the flamepath, can improve the IP rating. The feed through can be fitted with unspecified external operators, e.g. push-buttons.





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The scope of this certificate covers a range of internal components which may be installed within the flameproof enclosure, including limitations with respect to their location. Typical internal equipment comprises terminals, switches, contactors, relays and some intrinsically safe equipment. Although this certificate allows the inclusion of this intrinsic safety equipment, it does not endorse their intrinsic safety properties (see certificate conditions).

Incorporated amendments:

The product description includes the following applicable amendments. Amendments directly applicable to UKCA certification have been included in this list.

- 1. The Minipurge Interface Unit Type MIU/d was allowed to be used in the presence of combustible dust.
- 2. The Minipurge Interface Unit Type MIU/d was allowed to be used in a maximum upper ambient temperature of +55°C with a temperature classification of T5.
- 3. The type dK and dN enclosures were introduced.
- 4. The option of using a Killark Type KDB breather drain was introduced resulting in an alternative marking.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	03 Jun 2021	R80078969B	The release of the prime certificate.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (REGULATIONS SCHEDULE 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed in Section 9, all other requirements are demonstrated in the relevant reports.

17 PRODUCTION CONTROL

- 17.1 Holders of this certificate are required to comply with production control requirements defined in Schedule 3A, as applicable, and CSA Group Testing UK Regulations for Certificate Holders
- 17.2 Only the internal components listed in the manufacturer's drawing EP90-6 may be installed in the Minipurge Interface Units, in accordance with the geometrical restrictions laid down in manufacturer's drawings EP90-8A, EP90-8X, EP90-8T and SD7529.
- 17.3 The scope of this certificate, though allowing 'intrinsically safe equipment' to be installed in accordance with condition 17.2 does not imply compliance with EN 60079-11:2011 for either the installation or output parameters of such equipment.





Certificate Annexe

Certificate Number: **CSAE 21UKEX1068**

Minipurge Interface Unit Type MIU/d Product:

Manufacturer: **EXPO Technologies Limited**

Issue 0

Drawing	Sheets	Rev.	Date (Stamp)	Title
EP90-2dA	1 of 1	3	23 Mar 07	dA Box
EP90-2dT	1 of 1	2	23 Mar 07	dT Box
EP90-2dX	1 of 1	2	23 Mar 07	dX Box
EP90-3dA	1 of 1	6	23 Mar 07	Ex d Boxes Dimensions Key
EP90-4dA	1 to 9	7	30 Jul 15	d-Series Boxes Data Sheets
EP90-5	1 of 1	4	23 Mar 07	Earthing and Other Details
EP90-6	1 of 1	6	23 Mar 07	Permitted Contents for MIU/d
EP90-8A	1 of 1	4	23 Mar 07	dA Box Contents
EP90-8T	1 of 1	4	23 Mar 07	dT Box Contents
EP90-8X	1 of 1	4	23 Mar 07	dX Box Contents
EP90-10	1 of 1	3	23 Mar 07	Linear Feedthrough C9L
SD7485	1 of 1	2	23 Mar 07	Ex d Box Sealing for Dust Certification
SD7528	1 of 1	1	23 Mar 07	Key to Dimensions dK and dN Boxes
SD7529	1 of 1	1	23 Mar 07	dK and dN Boxes Contents
SD8491	1 to 2	1	21 May 21	MIU/d Certification Label UKCA

